

THE ROLE FORMAL HANDWRITING INSTRUCTION PLAYS IN
DEVELOPING GOOD HANDWRITING IN THE
ELEMENTARY SCHOOL

BY
PAUL S. BAARSON

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CHAPTER I

INTRODUCTION

We often hear the question, "What ever happened to good penmanship?" Many people claim we are becoming a nation of scrawlers and scratchers. Each day brings many examples of this to the dead-letter collections in post offices. The cost of bad handwriting is high. Many job applicants are turned down each year due to poor handwriting.

Handwriting instruction in the past was probably too stiff, rigid, isolated, and artificial. The result was that many colleges and teacher training institutes gave little attention to handwriting instruction in the curriculum. The result of poor handwriting instruction in teacher training institutions has resulted in poorly trained teachers of handwriting, with weakened or eliminated handwriting instructional programs in the elementary school.

This study will deal with the place of handwriting instruction in the elementary school curriculum. The investigator will determine some of the most successful practices to follow in setting up a handwriting program in the elementary school.

Statement of the problem. The problem was to find the place of formal handwriting instruction in the elementary school curriculum and to determine what part it plays in developing good handwriting among elementary students.

Procedure. This study was made to determine the place of formal handwriting instruction in developing good handwriting among students in the elementary school. The first step in this study was a review of the literature. The instructional method for the experimental group was

outlined. The Freeman Evaluation Scale was selected as the method of evaluating the handwriting samples. Two groups were selected to take part in the experiment. Beginning samples of the student's handwriting were taken. After samples of the student's handwriting were taken, handwriting instruction went on as outlined. During the last two weeks of school samples of the two group's handwriting were taken. The handwriting samples of the experimental group and the control group were evaluated as to the degree of improvement shown throughout the year. The results of the experiment were analyzed.

Definitions of Terms

Incidental method. In this study the "incidental method" of teaching handwriting refers to the method where handwriting is learned incidentally and no set time is set aside for systematic practice of handwriting activities in the curriculum.

Formal method. Throughout this study, the term "formal method" shall be interpreted as meaning the plan where every boy and girl receives daily teaching and practice in handwriting. Systematic practice will take place with this method. Practice goes from easy to difficult and will be concentrated on one difficulty at a time. It should be meaningful practice to the individual child.

Cursive writing. Writing that is formed by joining the letters of a word in a continuous, flowing movement.

Manuscript writing. Writing that is formed with unjoined letters; printing done by hand as opposed to print from a press. The first form of handwriting taught in most elementary schools is manuscript writing.

Limitations of this study. This study was limited by the number of students taking part in the study. The study was limited to two elementary classes located in one midwestern city. The study was further limited to evaluations of the handwriting samples by one person.

CHAPTER II

REVIEW OF THE LITERATURE

Limited amounts have been written about the importance of handwriting as a communication skill. The literature that has been written seemed to fall into two categories, namely the place of handwriting instruction in the school program and the role the classroom teacher plays in teaching handwriting. The first of these categories to be considered will be the place of handwriting instruction in the school program.

I. THE PLACE OF HANDWRITING INSTRUCTION IN THE SCHOOL PROGRAM

Handwriting is a skill which provides the individual with two important functions, it enables him to record and communicate his thoughts. Handwriting is one of the basic skills which is so much a part of our culture and way of life. Sister Xavier says that, "Communication is a fundamental need of man and handwriting is one of the facets of this important phase of embodying an abstraction, of making thought tangible."¹

Children receive all or most of their handwriting instruction in the elementary grades. The school has a responsibility to the child to help him develop to his fullest potential ability, his skill of handwriting. Handwriting is a skill which is not learned incidentally; it is a subject which needs daily teaching and practice as pointed out by Sister Mary Xavier:

¹Sister M. Xavier, "Handwriting," The Catholic Educator, XXXII (October, 1961) p. 187.

"Every girl and boy deserves the privilege of having special training in writing; consequently, handwriting needs a secure place in every grade in the elementary school where full time and provision should be made for its development."²

Everyone cannot be an expert penman, but legibility is wanted. Some children need more practice than others, and most children can learn to write legibly. Most children will benefit from regular handwriting instruction in the elementary school.

There is no reason to believe that high standards of handwriting can be reached or maintained by all children. A child should be able to adapt his writing to the writing task he has to do. It is more important that he learns how to make judgments to adapt to needs than to achieve rigidly fixed quality of pattern. Research shows that writing should be related to all other subjects and a child should become increasingly efficient and skillful in his production of writing.

Handwriting used to be treated as if it were a form of skill that was not affected by the purpose for which it was used nor by the subject which was being expressed. Freeman, a noted handwriting authority, in his writings points out that in most schools handwriting now is greatly affected by the purpose and type of subject matter; an adequate program of learning to write can be worked out only by considering its relationship to the rest of the school subjects. The student must be able to adapt his quality of writing to the need, whether it is notes for his own personal use or written material to communicate a thought to someone else. Freeman emphasizes that this makes it necessary in practice exercises to include material from the other areas of the curriculum, and also to give attention to the quality of the writing

²Ibid., p. 187.

the child does during the entire school day.³

Children should realize that if their handwriting progress is to become permanent, they must do their best in all their work. They should be expected to make use of writing skill in most subjects. The writing period will then become a time for analyzing and correcting individual problems. The handwriting period is a time when teacher and pupil will talk over problems and plan exercises for improvement of the handwriting skills.

Subjects which are easily correlated to handwriting are spelling, English, and reading. The choice of words in the handwriting exercises can come from these areas. Part of the goals of spelling are for the child to write the words correctly. When writing is correlated with these areas they reinforce each other, children also realize the need for good, legible writing at all times.

Doctor King, Assistant Superintendent of the Rochester, Minnesota public schools, recently conducted a survey among 680 superintendents of towns above 2000 population in four midwestern states. The purpose of his survey was to ascertain the degree to which handwriting is being emphasized in our schools today. The questions in the survey were brief and pertained to the: (1) presence or absence of a formal handwriting program; (2) program being used; (3) time being spent teaching handwriting; and (4) required training of teachers in handwriting. King's report is based on the 505 returns. The report shows that (30 per cent) of all school systems surveyed have no formal handwriting program. The responses indicated that fourteen commercial handwriting systems are being used in these schools. The survey

³Frank N. Freeman, Teaching Handwriting, Education Association Research Publication on Handwriting, Number 4 (Washington D.C., 1954) p. 23.

revealed that (59 per cent) of the schools reporting devoted fifty minutes per week to handwriting. In response to required training of teachers in handwriting, (9 per cent) of the schools require their teachers to have training in handwriting instruction.⁴

To maintain an effective program in handwriting in the elementary school, King concludes that five basic understandings are essential. These are discussed briefly:

- 1) A statement of philosophy in regard to the importance of effective handwriting instruction in the elementary school.
- 2) A formal program established through teacher concern for good education.
- 3) An orientation of the total staff to the program.
- 4) Meaningful in-service training in the teaching of handwriting.
- 5) Evaluation.

King offers his suggestions that instruction and practice are essential in the development of handwriting as a tool.⁵ Once the school has the five listed understandings in mind, they can proceed to set up a formal handwriting program.

The formal handwriting programs are usually of three types. The first is the commercially planned program, that is to be used exactly as designed. Another type is the locally developed through curriculum committees. The combination of the two are also used.

⁴Fred King, "Handwriting Practices In Our Schools Today," Elementary English, XXXVIII (November, 1961), pp. 483-486.

⁵Ibid., p. 483.

The handwriting program must provide for the formation of right habits and skills which will lead to legible handwriting.

Evidence indicates that handwriting cannot be successfully taught through the use of incidental methods alone. Handwriting instruction requires a developmental program with provisions for individualized instruction. Regularly assigned periods should be scheduled to teach specific aspects of handwriting.

In many schools the time is set aside for handwriting instruction in the daily schedule, but effective use of this time is not made use of. Freeman found in his studies of handwriting teaching in the elementary schools, "the difficulty is not the amount of time given to handwriting in the time schedule; it is the failure to use the time effectively."⁶

In 1951, an extensive survey by the University of Wisconsin, was conducted in Wisconsin elementary schools. The purpose of the survey was to find what is the most effective length of handwriting practice periods and how often they should be scheduled. The survey indicated that short practice periods either daily or on alternate days were favored. The average total time per week spent on formal handwriting in the 232 school systems taking part in the survey was about fifty minutes.⁷

Shockley, interprets the role of the elementary principal as the person being in the key position to develop a good handwriting program. The ways in which the principal will help in developing a handwriting program

⁶Freeman, op. cit., p. 30.

⁷University of Wisconsin, Department of Education, Handwriting in Wisconsin, A Study Prepared by the Committee for Research in Handwriting (University of Wisconsin, 1951), p. 21.

will be influenced by several factors. Teachers vary in their recognition of the importance of handwriting, and in their teaching ability in this area. Other things that will affect the principal's approach to developing a handwriting program will be intra-staff relationships, the type of community, the children's background, and the working philosophy of the school system.⁸

If the principal is the only person in the school system concerned about the importance of improving the teaching of handwriting, little improvement in the teaching of handwriting will take place. The principal can include the teachers in studying and evaluating their own handwriting program. The teachers can be provided with the opportunity of observing the teaching of handwriting in schools that have good handwriting programs in practice. The principal may include the faculty in the planning of an in-service training program for improving the teaching of handwriting.

The teachers must be in on the planning of the handwriting program so they can carry the plans out in their daily classroom practice. The teachers and principal must develop a philosophy to guide them before developing their handwriting program.

Some good points to keep in mind when planning a handwriting program are given by Shockley:

- 1) There is a philosophy accepted in practice by the school staff.
- 2) There is provision for necessary tools and materials that are necessary.
- 3) There is provision for techniques of evaluation which can be used by teachers and children.

⁸Robert J. Shockley, "The Principal Helps Teachers with Handwriting," The National Elementary Principal, XXXVIII (February, 1959), p. 21.

- 4) The program is based upon techniques that bring about the desired results.
- 5) Provision is made for an atmosphere in which new ideas and techniques can be tried.
- 6) Periodic re-evaluation of the program is provided for.⁹

In order for the program to be successful it must be carried out in the classroom so the student can get the benefit. The school must strive to impress upon the student that legible handwriting is achieved by continual practice and constant evaluation in all writing situations.

Handwriting enables the individual to record and communicate his thoughts. Handwriting is a skill worth developing to the best of an individual's ability. Most of the handwriting training an individual receives is in the elementary school. Legibility in handwriting is considered the most important phase of handwriting to emphasize in the school handwriting program. Most children will benefit from regular handwriting instruction and practice in the elementary school.

The Role The Classroom Teacher Plays In Teaching Handwriting

Teaching children to write has always been considered an important task of the elementary school.

It used to be that penmanship teachers were part of every well-run school system. In the depression-bound 1930's, however, many schools trimmed expenses by eliminating penmanship instructors. At the same time,

⁹Ibid., p. 21.

the importance of handwriting as a separate subject was minimized.¹⁰

With few school systems now employing special teachers to teach handwriting, the role of teaching children to write rests with the classroom teacher.

The child comes to school with the desire to learn to write already present. Students in the primary grades want to learn to write, Hanigan has found that, "It is during the primary years that children have the greatest personal motivation for good handwriting."¹¹

Children in the primary grades want to know the correct way to make letters. In the first grade, the children want to practice, and it is the role of the teacher to provide worthwhile practice. Hanigan points out that small children learn much by imitation. Therefore, the teacher's own handwriting should exemplify neatness, appeal, correct handwriting, and purpose.¹²

Beginning writing should be simple, easy to perform and read, and that the symbols of reading and writing should be as nearly alike as possible, one alphabet which will facilitate both. Manuscript writing which is a form of writing, and not printing, is the answer to this problem. Surveys that have been made show that nearly (90 per cent) of the schools use manuscript in the first grade.¹³

¹⁰W. M. Kiplinger (ed.), "Your Handwriting Awful?" Changing Times The Kiplinger Magazine, XII (March, 1958), p. 18.

¹¹Levin B. Hanigan and Grace Hildebrand, "Handwriting in the Primary Program," The National Elementary Principal, XXXVIII (February, 1959), p. 9.

¹²Ibid., pp. 8-9.

¹³Dorothy H. Stewart, "Handwriting Up To Date," Elementary English, (November, 1952), p. 407.

Coordination and physical development play an important part in early writing of young children. The more complicated cursive writing may be too difficult for some young children, as indicated by Hanigan and Hildebrand:

"The motor development and coordination of young children enable them to make the circles and straight lines of manuscript with greater success than the more complicated forms of cursive writing."¹⁴

The time for transition from manuscript to cursive writing varies from school system to school system. Both Herrick and Jacobs feel the proper time of transition depends more on the nature of the current program, the convenience of the teacher, and the demands of the community than on factors in the development of children.¹⁵

The Freeman Survey,¹⁶ the Polkinghorne Study,¹⁶ and a survey of handwriting practices in Texas,¹⁶ found that most schools make the change from manuscript to cursive writing in the third grade.

The time of transition from manuscript to cursive writing varies. Herrick found that with periods of fifteen to twenty minutes per day, over a period of four to six weeks, the transition can be made satisfactorily with third and fourth graders.¹⁷

Hanigan and Hildebrand found that from the fourth grade on there is a steady decline in handwriting interest. More attention is focused on the

¹⁴Hanigan and Hildebrand, op. cit., p. 10.

¹⁵Virgil E. Herrick and Leland B. Jacobs (ed.), Children and Language Arts, (Prentice-Hall, Inc., 1955), p. 273.

¹⁶Manuscript Handwriting, A Research Memo Prepared by the National Education Association Research Division (Washington: National Education Association, 1958), p. 2.

¹⁷Herrick and Jacobs, op. cit., p. 274.

content to be written.¹⁸

Blozer, one of the leading handwriting authorities, feels that practice at the intermediate level should be largely concentrated on individual needs and differences. The intermediate teacher must be familiar with specific techniques of the skill at intermediate levels. The teacher must be able to assist the student in analyzing his work and in turn offer suggestions that contribute to performance and readability.¹⁹

Freeman, a noted author of handwriting articles, points out in his writing that if a teacher is to help a child make reasonable progress it is necessary to show him how to discover and analyze the faults of his writing. Faults in the way he writes have to do with posture, position, and movement. In addition to these easily observed features, there are the subtler matters of rhythm and ease and lightness of movement.²⁰

The role of the upper elementary teacher is to help pupils see why legibility is important. The upper elementary teacher must be thorough and recognize that proper handwriting in the classroom is required at all times, not just during penmanship drills.

The Wisconsin study found that teachers rate legibility as the most important objective in handwriting; they rate the specific legibility factors of letter formation, slant, and spacing as of next importance, in that order. Speed is the factor which is least stressed, the majority of schools replying to the study indicated that they had no minimum speed standards at

¹⁸Hanigan and Hildebrand, op. cit., p. 9.

¹⁹Parker Z. Bloser, "The Importance of Handwriting as a Language Skill," Trends in Teaching, (1962-63 Yearbook), p. 13.

²⁰Frank N. Freeman, Teaching Handwriting, Education Association Research Publication on Handwriting, Number 4 (Washington D.C., 1954), p. 20.

any grade level.²¹

King interviewed elementary school principals and asked them the question, "Whether or not a high correlation could be found between teachers who have good handwriting programs and teachers who insist upon high quality work?" The majority of the principals interviewed felt that where a good handwriting program exists, higher quality written work is demanded.²²

The accumulated evidence suggests the important role the classroom teacher plays in helping children to develop good handwriting practices.

Teaching the child to write has always been considered one of the most important jobs of the elementary school. The job of teaching children to write in most schools rests with the classroom teacher. The primary teachers have the children when most children have the strongest desire to learn to write. Young children need writing which is easy to read and write, so manuscript writing is usually the first form of handwriting to be taught. The switch from manuscript to cursive writing usually takes place in the middle elementary grades. In the upper elementary grades handwriting practice is concentrated on individual needs and differences. Legibility is the phase of writing that receives the most emphasis in the upper elementary grades.

Summary: Handwriting enables the individual to record and communicate his thoughts. Most of the handwriting training an individual receives is in the elementary school. Teaching the child to write has always been

²¹University of Wisconsin, Department of Education, Handwriting in Wisconsin, A Study Prepared by the Committee for Research in Handwriting (University of Wisconsin, 1951), p. 25.

²²Fred King, "Improving the Handwriting Program," The National Elementary Principal, XXXVIII (February, 1959), p. 17.

considered one of the most important jobs of the elementary school. Manuscript is usually the first form of handwriting to be taught, followed by cursive handwriting. Legibility is the phase of writing that receives the most emphasis in the upper elementary grades.

CHAPTER III

MATERIALS USED AND GROUPS STUDIED

The experiment was conducted to find which was more effective, a formal handwriting program, or an incidental handwriting program. Two sixth grade groups were used in the study. A formal handwriting program with definite time periods and planned handwriting lessons was used with one group of sixth grade students. The other sixth grade group receiving the incidental handwriting instruction had no definite time set aside in the daily classroom program for handwriting and no systematic practice in handwriting took place.

The experiment was conducted in the Banfield Elementary School, Austin, Minnesota. Banfield has an enrollment of 661 pupils, serving grades kindergarten through six.

The groups used in the experiment were sixth graders. There are three sixth grades in the school each having enrollments of twenty-five students. The groups were divided as heterogeneously as possible. Two of the sixth grades took part in the experiment, the sixth grade group being taught by the investigator did not take part in the experiment.

Groups used. The two sixth grades used in the experiment consisted of fifty pupils. There were twenty-seven boys in the group and twenty-three girls in the group. The formally instructed group consisted of twelve girls and thirteen boys. The incidentally instructed group consisted of eleven girls and fourteen boys. The groups both had male instructors of similar educational backgrounds.

General procedures used with the groups. Each sixth grade teacher is responsible for the handwriting program in their classroom. The two

sixth grade teachers taking part in the experiment agreed to carry on their handwriting program as they had in previous years. The one teacher would carry on a formal program where every student would receive daily handwriting instruction and systematic handwriting practice. The formally instructed group averaged about fifty minutes of handwriting instruction and practice a week. The incidentally instructed group received no planned handwriting instruction and no planned handwriting practice periods.

The formally-instructed group. The sixth grade group receiving formal handwriting instruction had twelve girls and thirteen boys. They spent approximately fifty minutes a week throughout the year receiving planned handwriting instruction and planned handwriting practice periods. Improving legibility was the main purpose of their handwriting exercises. Legibility was emphasized in every handwriting lesson. In other written work legibility was also stressed and evaluated. Planned handwriting exercises were used daily. The Winston Communication Program, American English Book Six was the chief source of the handwriting exercises. It served as the student's textbook and guide for the handwriting class. The I Learn To Write series by E. C. Seale and Company and Guiding Growth In Handwriting by Frank N. Freeman were also used as sources for planned handwriting exercises. The exercises chosen were planned by the instructor to satisfy some practical need. The choice of what was written was for the purpose of improving legibility, so words and letters were chosen to represent an advancing scale of difficulty. Practice advanced from easy to difficult exercises for the student. The students concentrated on one difficulty at a time, and worked on handwriting exercises that helped them to overcome their difficulty. The handwriting exercise to overcome the

difficulty was performed often enough so the effect of one performance was not forgotten before the next practice took place, this reinforcement would help to overcome the difficulty.

In the fall at the Parent Teachers Association open house the instructor used handwriting as his topic for discussion with the parents. Using handwriting as the topic for discussion at this meeting created an interest in good handwriting among the parents. The instructor prepared a bulletin board display showing some areas of handwriting instruction that would be stressed during the year. The parents were shown samples of their child's handwriting at the Parent Teachers Association open house. Later in the year the parents had an opportunity to compare various samples of their child's handwriting to look for improvement. There were certificates awarded to the students who showed the most improvement over the year.

The incidentally-instructed group. The sixth grade group receiving incidental-instruction had eleven girls and fourteen boys. There was no time set aside in the group's classroom program for handwriting instruction. The instructor had no planned handwriting lessons or exercises for this group. If students requested help in the formation of certain letters, the instructor helped them. In written work neatness and legibility were encouraged, but no undue emphasis was exerted in this area. Handwriting instruction was not emphasized with this group. The group had opportunities to use handwriting in classroom work. The group did much creative writing in connection with their work in English. This written work was required to be handwritten and legible so the writer could communicate his thoughts to the reader.

Obtaining samples of the two groups handwriting: The investigator met with the two sixth grade classes daily at different times to instruct the classes in arithmetic. It was during these periods that the investigator obtained samples of their handwriting under like conditions.

The students all wrote the same sample exercises under like conditions. The exercises consisted of two parts. The first part consisted of writing capital and lower-case letters of the alphabet, numbers and a written paragraph. The second part consisted of writing a paragraph that could be used with the Guiding Growth in Handwriting Evaluation Scale developed by Frank Freeman.¹ The first sample of the student's handwriting was taken on September 14, approximately two weeks after school started in the fall. The final sample was taken in May, near the end of the school year.

Evaluating the handwriting samples of the two experimental groups: The evaluator was well trained in the teaching of handwriting and had done extensive teaching of handwriting in the elementary grades. The evaluator had previous experience in using the Freeman Handwriting Evaluation Scale. The Freeman Evaluation Scale was used to score the student's handwriting samples. The Freeman Evaluation Scale has five sixth grade writing specimens of various degrees of proficiency. The scale suggests that similar specimens are graded as follows: poor marked 65 and lower, fair marked 70, medium marked 75, good marked 80, and high marked 85 and higher. The scale gives specific directions for the evaluator to follow. The student's three handwriting samples were fastened together along with a score sheet for each student's handwriting sample to record their beginning score and their final

¹See appendix.

score. The samples from the two groups were mixed together for scoring.

A comparison was then made between the student's beginning score and their final score to see the amount of improvement for each student. The improvement between the two groups was also compared. This was done by comparing the two groups total beginning score and comparing their total final score. By comparing the difference it was possible to see if there was a significant difference between the scores of the two groups. A significant difference in score would indicate which method of instruction was more effective.

Summary: The experiment was conducted to find which was more effective, a formal handwriting program or an incidental handwriting program. Two sixth grade classes were used as experimental groups. The instructional method for the experimental group was outlined. Samples of the student's handwriting were collected at the beginning of the year and near the end of the school year. The samples were evaluated using the Freeman Evaluation Scale. The improvement between the two groups was compared to determine which method of instruction was most successful in improving and teaching handwriting skills.

CHAPTER IV

FINDINGS

The student's three handwriting samples, together with an evaluation score sheet were fastened together to be evaluated and scored. The evaluator used the Freeman Evaluation Scale to give each student's handwriting sample a beginning score and a final score which was recorded on the score sheet. After scoring, the two groups' specimens were separated and the beginning total score and final total score for each group was found. The beginning average individual score and final average individual score was found.

TABLE 1
GROUP AND INDIVIDUAL SCORES AND AVERAGE GAINS

Incidental Instructed Group	Beginning Score	Final Score	Group's Gain
Group's Total Score	1840	1970	130
Average Individual Score	73.6	78.8	5.2
Formally Instructed Group			
Group's Total Score	1920	2095	175
Average Individual Score	76.8	83.8	7

The incidentally instructed group's beginning mean score of 73.6 points and final mean score of 78.8 points on the Freeman Evaluation Scale showed a mean increase of 5.2 points on the Freeman Scale.

The formally-instructed group's mean beginning score of 76.8 points and final individual score of 83.8 points on the Freeman Scale showed a mean

increase of seven points for each student.

The incidentally-instructed group's total beginning score of 1,840 points and final group score of 1,970 points showed a group gain of 130 points.

The formally-instructed group's total beginning score of 1,920 points and final group score of 2,095 points showed a group gain of 175 points.

The incidentally-instructed group had a range of scores from 65 to 85 points for the beginning score. The range in points was from 70 to 95 in the final scoring.

The formally-instructed group had a range in beginning scores from 70 to 90 points. In the final scoring they had a range from 70 to 95 points.

The final high score for both groups was 95 points. The incidentally instructed group had two students receive 95 points in the final scoring. The formally-instructed group had five students that received 95 in the final scoring.

The formally-instructed group showed a mean individual gain of seven points. The incidentally instructed group showed a mean individual gain of 5.2 points. The results show a 1.8 point gain per student by the formally-instructed group over the incidentally-instructed group. In order to determine if the two groups were initially equivalents as far as handwriting ability, a Z^1 test was applied to the beginning scores. Z was found to equal 2.12. From the tables this indicated the experimental group to be significantly higher at the 1.7% level. Since there was a difference in the beginning it was decided to compare the amount of increase in writing ability

¹N. M. Downie and R. W. Heath, Basic Statistical Methods, Harper and Brothers, New York, 1959, p. 60.

between the two groups during the course of the experiment. By means of the Z test a comparison was made of the mean gains of the two groups. Z was found to be equal to .546 which by reference to the tables is not significant. Hence the null hypothesis that there was no significant difference in the gains in the mean scores of the two groups was accepted. The CHI square² was also used to see if there was any significant differences in mean scores between the two groups. χ^2 was found to equal 2.38 which by reference to the tables indicated there was no significant gain in the mean score of the experimental group over the control group.

Summary: The evaluator used the Freeman Evaluation Scale to rate the student's handwriting samples. The results showed a 1.8 point gain per student by the experimental group over the control group. It was determined that the two groups were not equal in the beginning. A comparison was made of the mean gains of the two groups by means of the Z test and CHI² and no significant difference in the mean gains between the two groups was found.

²Ibid., p. 147.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study has been concerned with the role formal handwriting instruction plays in developing good handwriting in the elementary school.

Summary: Handwriting enables the individual to record and communicate his thoughts. Most of the handwriting training an individual receives is in the elementary school. Legibility in handwriting is considered the most important phase of handwriting. Learning to write has always been considered one of the most important jobs of the elementary school. The job of teaching children to write in most schools rests with the classroom teacher. Manuscript writing is usually the form of handwriting to be taught. In the upper elementary grades handwriting practice is concentrated on individual needs and differences.

To determine what part formal handwriting instruction plays in developing good handwriting two groups of students were used, the experimental group receiving formal handwriting instruction, the control group receiving incidental instruction. Samples of the student's handwriting were collected. The samples were evaluated and a comparison of the mean gains of the two groups was made. The difference in gains between the two groups was found not to be significant.

Conclusions: From the results of this study it was concluded that spending fifty minutes weekly on formal handwriting instruction cannot be justified unless the improvement shown is greater.

Recommendations: On the basis of the previously stated conclusions I would recommend that further study be carried on to determine what part formal handwriting instruction plays in the improvement of handwriting

among elementary students. It is recommended that experiments be carried on to find more effective ways of teaching handwriting.

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APPENDIX A

SCORE SHEET FOR THE FREEMAN EVALUATION SCALE

HANDWRITING EVALUATION SCORE SHEET

GRADE 6

<u>SPECIMEN</u>	<u>BEGINNING SCORE</u>	<u>FINAL SCORE</u>
Specimen 1-High Specimens in this group may be marked 85 and above	_____	_____
Specimen 2-Good Specimens in this group may be marked 80.	_____	_____
Specimens 3-Medium Specimens in this group may be marked 75.	_____	_____
Specimen 4-Fair Specimens in this group may be marked 70.	_____	_____
Specimen 5-Poor Specimens in this group may be marked 65, and writing poorer may be marked accordingly.	_____	_____

HOW TO EVALUATE WRITING, USING THE FREEMAN EVALUATION SCALE

- A. First evaluate the beginning specimen and score, then evaluate the final specimen and score.
- B. Classify the papers roughly into three groups, calling them good, medium, and poor.
- C. Beginning with the "good" group, compare each paper individually with the specimens of the scale. If it is equal to any of the specimens, give it the grade assigned to that specimen. If it is better than the top specimen, give it a grade of 90 or 95. If it is poorer than the bottom specimen, give it a grade of 60 or lower.

POINTS TO JUDGE ON

- A. Legibility.
- B. Uniformity of size.
- C. Slant.
- D. Spacing.